

Supplementary Table 1. Evolution of the Electrophysiological Properties During Adult Neuronal Maturation.

	Class 1	Class 2	Class 3	Class 4	Class 5	Mature granule cells
R_m (G Ω)	2.02 \pm 0.21 (21) ns, ns, *, ****	1.99 \pm 0.22 (23) ns, ns, ***	1.70 \pm 0.14 (28) ns, ****	1.46 \pm 0.15 (29) **	0.86 \pm 0.08 (33)	0.8 \pm 0.16 (8) ns
C_m (pF)	6.2 \pm 0.5 (21) ****, ****, ****, ****	9.6 \pm 0.6 (23) *, ****, ****	11.3 \pm 0.5 (28) *, ****	13.4 \pm 0.7 (29) *	15.9 \pm 0.8 (33)	13.8 \pm 1.1 (8) ns
V_{rest} (mV)	-37 \pm 2.6 (26) *, **, ***, ****	-46 \pm 2.7 (23) ns, ns, ***	-48.3 \pm 2.1 (16) ns, **	-52.2 \pm 2.2 (27) *	-61.2 \pm 2.8 (18)	-65.9 \pm 2.8 (7) ns
% of spiking neurons	0 (27)	0 (31)	0 (29)	22.6 (31)	88.2 (34)	100 (9)
% of expressing Na curr	0 (27)	6.9 (31)	37.9 (29)	80 (31)	100 (34)	100 (9)
Amp of Na curr (pA)	0 (27)	20 (1)	43.8 \pm 3.2 (8)	296.1 \pm 63.3 (23)	1011 \pm 44.3 (31)	nd
% GABA _A R	73.3 (15)	88.9 (9)	100 (30)	100 (30)	100 (34)	100 (8)
GABA curr amp (pA)	56.6 \pm 21.7 (8)	240 \pm 100.9 (8)	217 \pm 57.8 (3)	400 (1)	nd	nd
% AMPAR	28.6 (14)	70.6 (17)	73.7 (19)	100 (25)	100 (28)	100 (8)
AMPA curr amp (pA)	27.5 \pm 8.3 (4)	54.3 \pm 20.3 (12)	79.1 \pm 14.7 (12)	92 \pm 15.9 (5)	110 \pm 26.5 (3)	nd
% NMDAR	0 (11)	50 (14)	68.8 (16)	91.7 (12)	100 (5)	nd
NMDA curr amp (pA)	0 (11)	73.9 \pm 15 (7)	121.7 \pm 15 (9)	116.4 \pm 17.3 (7)	178 \pm 29.1 (5)	nd
% of sIPSCs	0 (26)	0 (30)	79.3 (29)	96.8 (31)	100 (34)	100 (7)
% of sEPSCs	0 (26)	0 (27)	35.7 (28)	76.7 (30)	94.1 (34)	100 (7)
sIPSC frequency (Hz)	-	-	0.15 \pm 0.05 (19)	0.24 \pm 0.08 (25)	0.66 \pm 0.15 (34)	0.49 \pm 0.09 (7) ns
sEPSC frequency (Hz)	-	-	0.65 \pm 02 (9)	1.96 \pm 0.67 (18)	3.02 \pm 0.54 (26)	4.75 \pm 0.43 (7) ns
sIPSC amplitude (pA)	-	-	40.4 \pm 5.4 (17)	45.5 \pm 3.9 (25)	53 \pm 6 (34)	57.4 \pm 8.4 (7) ns
sEPSC amplitude (pA)	-	-	7.1 \pm 0.6 (9)	12.1 \pm 0.9 (18)	13.1 \pm 1.4 (26)	12 \pm 1.8 (7) ns
sIPSC decay time (ms)	-	-	19 \pm 2 (17)	25 \pm 2.1 (25)	16.8 \pm 7.1 (34)	17.7 \pm 2.6 (7) ns
sEPSC decay time (ms)	-	-	3.3 \pm 0.5 (9)	3.1 \pm 0.3 (18)	3.6 \pm 0.33 (26)	5.2 \pm 0.8 (7) ns

Statistical comparisons between groups were done with the non-parametric Mann-Whitney U-test. For each class, the statistical values represent comparisons between consecutive groups. For example, regarding R_m of class 1 neurons: ns, ns, *, **** = comparison between classes 1 and 2: ns, 1 and 3: ns, 1 and 4: p < 0.05, 1 and 5: p < 0.0001. Abbreviations used: ns: not significant; * : p<0.05; ** : p < 0.01; *** : p < 0.001; **** : p < 0.0001; nd: not determined. For comparison between mature GCs and class 5 neurons, the Kolmogorov-Smirnov test was used for PSC frequency, amplitude and decay time. AMPA and GABA_A current amplitudes were determined at −60 mV and NMDA current amplitudes at +60 mV. The Na⁺ current amplitude was measured with a 30 mV depolarization from −60 mV.